Print selected from Online sessionPage 1

(FILE 'HOME' ENTERED AT 10:09:10 ON 22 MAR 2002)

FILE 'BIOSIS, EMBASE, CAPLUS, MEDLINE, CANCERLIT' ENTERED AT 10:09:37 ON 22 MAR 2002

```
L1          258 S (IMMUNOSTIMULATORY OR IMMUNOMODULATORY) (W) SEQUENCE
L2         7842 S ISS
L3         7985 S L1 OR L2
L4         2212 S L3 AND (PREVENT? OR TREAT?)
L5        92976 S (HERPES SIMPLEX VIRUS) OR HSV?
L6            4 S L4 AND L5
L7            3 DUP REM L6 (1 DUPLICATE REMOVED)
```

d l7 1-3 ti abs ibib

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
TI Methods of ameliorating symptoms of herpes infection using immunomodulatory polynucleotide sequences
AB The invention provides new methods of **preventing** and/or **treating** herpes virus infections, particularly reducing infection, one or more symptoms and recurrence of one or more symptoms of **herpes simplex virus** infection. A polynucleotide comprising an **immunostimulatory sequence** (an "**ISS**") is administered to an individual which is at risk of being exposed to .alpha.-herpesvirinae, has been exposed to .alpha.-herpesvirinae or is infected with .alpha.-herpesvirinae. The **ISS** is administered without any .alpha.-herpesvirinae antigens. Administration of the **ISS** results in reduced incidence, recurrence, and severity of one or more symptoms of .alpha.-herpesvirinae infection.

ACCESSION NUMBER: 2001:693098 CAPLUS
DOCUMENT NUMBER: 135:267199
TITLE: Methods of ameliorating symptoms of herpes infection using immunomodulatory polynucleotide sequences
INVENTOR(S): Van Nest, Gary
PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001068103	A2	20010920	WO 2001-US7841	20010312

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-188556P P 20000310
US 2001-802518 A 20010309

L7 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Correction of PREVIEWS 98794574. Immunogene approach toward cancer therapy using epidermal growth factor receptor-mediated gene delivery. Correction of abstract, and of title from Immunogene approach toward cancer therapy using erythrocyte growth factor receptor-mediated gene delivery. Erratum published in Cancer Gene Therapy Vol. 3. **Iss**. 4. 1996. p. 279.
AB In this article we describe an improved method to produce a conjugate of anti-epidermal (corrected from anti-erythrocyte) growth factor (EGF) receptor monoclonal antibody with polylysine via thio-ether bonds. The resulting antibody/polylysine conjugate was found to be a much more stable DNA (gene) carrier than the previous conjugate formed via disulfide bonds. We designated the conjugate as an "immunoporter" and the immunoporter/DNA (gene) complex as an "immunogene". The fluorescent microscopic observation showed that the immunoporter as well as immunogene bound specifically to the EGF receptors on the cell surface, and the loaded reporter gene, such as beta-galactosidase (beta-GAL), was detected in the cell nucleus at 2 hours after transfection. The enzyme activity from the beta-GAL gene was

detected at 12 hours and increased for 3 to 5 days. Similar kinetics were obtained for another reporter gene, chloramphenicol acetyltransferase. Furthermore, the immunoporter delivered the **herpes simplex virus** thymidine kinase gene and induced substantial suicide effects on tumor cells when gancyclovir or acyclovir was added. Thus, the immunogene approach was successful in delivering therapeutic genes to EGF receptor overexpressing tumor cells. Further technical refinement may prove useful as a supplementary **treatment** of patients with squamous cell carcinomas.

ACCESSION NUMBER: 1996:540533 BIOSIS
DOCUMENT NUMBER: PREV199699262889
TITLE: Correction of PREVIEWS 98794574. Immunogene approach toward cancer therapy using epidermal growth factor receptor-mediated gene delivery. Correction of abstract, and of title from Immunogene approach toward cancer therapy using erythrocyte growth factor receptor-mediated gene delivery. Erratum published in Cancer Gene Therapy Vol. 3. **Iss**. 4. 1996. p. 279.
AUTHOR(S): Shimizu, Nobuyoshi (1); Chen, Jiabing; Gamou, Shinobu; Takayanagi, Atsushi
CORPORATE SOURCE: (1) Dep. Mol. Biol., Keio Univ. Sch. Med., 35 Shinanomachi, Shinjuku-ku, Tokyo 160 Japan
SOURCE: Cancer Gene Therapy, (1996) Vol. 3, No. 2, pp. 113-120. ISSN: 0929-1903.
DOCUMENT TYPE: Article; Errata
LANGUAGE: English

L7 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
TI DEFICIENT **HERPES SIMPLEX VIRUS**-INDUCED INTERFERON-ALPHA PRODUCTION BY BLOOD LEUKOCYTES OF PRETERM AND TERM NEWBORN INFANTS. CORRECTION OF ABSTRACT. ERRATUM PUBLISHED IN PEDIATR RES VOL. 27. **ISS**. 5. 1990. P. 507.
AB The ability of peripheral blood mononuclear cells (PBMC) from newborn infants, gestational age 24-42 wk, to produce interferon-.alpha. (IFN-.alpha.) on the first day after birth was studied in vitro. Human amnion cells (WISH) coated with **herpes simplex virus** type I and fixed by glutaraldehyde were used as IFN-.alpha. inducers. Individual IFN-.alpha. producing cells (IPC) among PBMC were determined by an immunoplaque assay. The frequency of IPC was low in all premature (.ltoreq. 36 wk) infants (median 0.3 IPC/104 PBMC, range 0.0-2.6), and significantly higher (median 2.0 IPC/104 PBMC, range 0.0-16.4) in term infants (> 37 wk). The frequencies were lower in both groups of infants than in adults (7.3 IPC/104 PBMC, range 2.0-23.7). When a conditioned medium from cultures of **herpes simplex virus** type I-stimulated PBMC from adults was added to the IFN induction cultures, the frequencies of IPC increased in PBMC from both preterm and term infants, and in the latter group did not differ significantly from adult levels. The median production of IFN-.alpha. per IPC was 1.1 U (range 0.0-2.8) in premature infants, 1.0 U (range 0.0-8.8) in term infants and 3.2 U (range 1.5-8.0) in adults. When concentrations of PBMC in the cultures were decreased, a decline of IPC frequencies occurred. This decline was more marked and started at higher PBMC concentrations in infants than in adults, and was **prevented** by addition of conditioned medium from **herpes simplex virus** type I-stimulated cultures of PBMC from adults. The results suggest that PBMC of preterm infants on the first day after birth are deficient both with respect to the proportion of actual IPC and to accessory mechanisms necessary for a normal IFN-.alpha. response. In contrast, IPC frequencies in term infants approach levels of adults, but accessory functions may still be deficient.
ACCESSION NUMBER: 1990:109555 BIOSIS
DOCUMENT NUMBER: BA89:59046

TITLE:	DEFICIENT **HERPES SIMPLEX VIRUS** -INDUCED INTERFERON-ALPHA PRODUCTION BY BLOOD LEUKOCYTES OF PRETERM AND TERM NEWBORN INFANTS. CORRECTION OF ABSTRACT. ERRATUM PUBLISHED IN PEDIATR RES VOL. 27. **ISS**. 5. 1990. P. 507.
AUTHOR(S):	CEDERBLAD B; RIESENFELD T; ALM G V
CORPORATE SOURCE:	INTERFERON LAB., BIOMED. CENT., BOX 582, 751 23 UPPSALA, SWED.
SOURCE:	PEDIATR RES, (1990) 27 (1), 7-10. CODEN: PEREBL. ISSN: 0031-3998.
FILE SEGMENT:	BA; OLD
LANGUAGE:	English

WEST Search History

DATE: Friday, March 22, 2002

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ			
L6	l4 and L5	6	L6
L5	(herpes simplex virus) or hsv?	8114	L5
L4	L3 and (prevent? or treat?)	348	L4
L3	l1 or L2	1965	L3
L2	iss	1945	L2
L1	(immunostimulatory or immunomodulatory) adj sequence	42	L1

END OF SEARCH HISTORY

NCBI **results of BLAST**

BLASTN 2.2.2 [Dec-14-2001]

Reference:
Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1016809145-760-3704

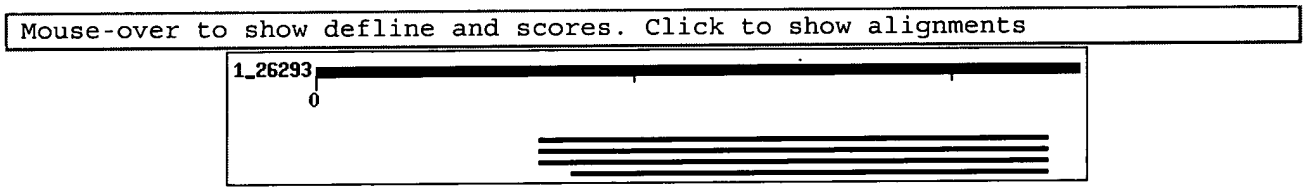
Query=
(24 letters)

Database: All GenBank+EMBL+DDBJ+PDB sequences (but no EST, STS, GSS, or phase 0, 1 or 2 HTGS sequences)
1,184,532 sequences; 5,058,164,017 total letters

If you have any problems or questions with the results of this search please refer to the **BLAST FAQs**

Taxonomy reports

Distribution of 5 Blast Hits on the Query Sequence



Sequences producing significant alignments:	Score (bits)	E Value	
gi|12707243|gb|AY024027.1| Oryza sativa microsatellite MRG6...	34	1.8	
gi|15718427|dbj|AP003370.2|AP003370 Oryza sativa genomic DN...	34	1.8	
gi|13486822|dbj|AP003074.2|AP003074 Oryza sativa genomic DN...	34	1.8	U
gi|14165313|gb|AC051624.6|AC051624 Genomic Sequence for Ory...	32	7.1	

Alignments

>gi|12707243|gb|AY024027.1| Oryza sativa microsatellite MRG6352 containing (CGTT)X6 to marker G132, genomic sequence
Length = 224

Score = 34.2 bits (17), Expect = 1.8
Identities = 17/17 (100%)
Strand = Plus / Plus

```
Query: 8  acgttcgttaacgttcg 24
          |||||||||||||||||
Sbjct: 50 acgttcgttaacgttcg 66
```

>gi|15718427|dbj|AP003370.2|AP003370 Oryza sativa genomic DNA, chromosome 1, BAC cl
sequence
Length = 101102

Score = 34.2 bits (17), Expect = 1.8
Identities = 17/17 (100%)
Strand = Plus / Plus

```
Query: 8     acgttcgttaacgttcg 24
              |||||||||||||||||
Sbjct: 5169  acgttcgttaacgttcg 5185
```

Score = 32.2 bits (16), Expect = 7.1
Identities = 16/16 (100%)
Strand = Plus / Plus

```
Query: 9     cgttcgttaacgttcg 24
              ||||||||||||||||
Sbjct: 5194  cgttcgttaacgttcg 5209
```

>gi|13486822|dbj|AP003074.2|AP003074 Oryza sativa genomic DNA, chromosome 1, BAC
Length = 150379

Score = 34.2 bits (17), Expect = 1.8
Identities = 17/17 (100%)
Strand = Plus / Minus

```
Query: 8     acgttcgttaacgttcg 24
              |||||||||||||||||
Sbjct: 11078 acgttcgttaacgttcg 11062
```

>gi|14165313|gb|AC051624.6|AC051624 Genomic Sequence for Oryza sativa, Nipponbare s
OSJNBb0036B06, from Chromosome 10, complete sequence
Length = 148263

Score = 32.2 bits (16), Expect = 7.1
Identities = 16/16 (100%)
Strand = Plus / Minus

```
Query: 9     cgttcgttaacgttcg 24
              ||||||||||||||||
Sbjct: 65603 cgttcgttaacgttcg 65588
```

Database: All GenBank+EMBL+DDBJ+PDB sequences (but no EST, STS, GSS,
or phase 0, 1 or 2 HTGS sequences)
Posted date: Mar 19, 2002 7:02 AM
Number of letters in database: 763,196,721
Number of sequences in database: 1,184,532

Lambda	K	H
1.37	0.711	1.31

Gapped

Lambda	K	H
1.37	0.711	1.31

Matrix: blastn matrix:1 -3
Gap Penalties: Existence: 5, Extension: 2

Number of Hits to DB: 8358
Number of Sequences: 1184532
Number of extensions: 8358
Number of successful extensions: 4833
Number of sequences better than 10.0: 4
length of query: 24
length of database: 5,058,164,017
effective HSP length: 17
effective length of query: 7
effective length of database: 5,038,026,973
effective search space: 35266188811
effective search space used: 35266188811
T: 0
A: 30
X1: 6 (11.9 bits)
X2: 15 (29.7 bits)
S1: 12 (24.3 bits)
S2: 16 (32.2 bits)